

NWS FORM E-5 (11-88) (PRES. BY WSOM E-41)	U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL WEATHER SERVICE	HYDROLOGIC SERVICE AREA (HSA) WFO Jackson, Mississippi
MONTHLY REPORT OF RIVER AND FLOOD CONDITIONS		REPORT FOR: MONTH YEAR October 2003
TO: Hydrometeorological Information Center, W/OH2 NOAA / National Weather Service 1325 East West Highway, Room 7230 Silver Spring, MD 20910-3283		SIGNATURE Alan Gerard, MIC In Charge of HSA DATE November 14th , 2003

When no flooding occurs, include miscellaneous river conditions, such as significant rises, record low stages, ice conditions, snow cover, droughts, and hydrologic products issued (WSOM E-41)

Synopsis...

Last October the word to describe the month was WET; however, this October could be characterized as TYPICALLY DRY. Actually, this October was a little drier than normal over most areas of the HSA. A series of cold fronts pushed through the area during the month, many of which moved through very rapidly and produced little or no rainfall. The only exception were two events which produced significant rainfall.

The most significant rainfall event occurred from the 9th to the 11th. A series of upper air systems moved across the area and a surface low pressure area over southeast Louisiana combined to produce rainfall amounts from .50 to near 4 inches. Some 24 hour rainfall amounts: 3.38 inches at Topton, MS (10th); 3.36 inches at Meridian (10th); 3.03 inches at Kosciusko, MS (10th); 2.64 inches at Vaiden, MS (10th); 2.60 inches at Lexington, MS (10th); 2.50 inches at Walnut Grove, MS (11th); Belzoni, MS(11th); and Louisville, MS (10th).

Another significant rainfall event occurred from the 25th to early on the 26th. A strong cold front pushed into the HSA producing isolated thunderstorms and scattered heavy rainfall. Rainfall amounts ranged from .25 over southern portions of northeast Louisiana to well over 2 inches scattered across Mississippi. Some 24 hour rainfall totals ending at 7am on the 26th were: 2.50 inches at Prentiss, MS; 2.48 inches at Leland, MS; 2.60 inches at Pat Harrison Waterway's Big Creek Waterpark; 2.28 inches at Stoneville, MS; 2.27 inches at Moorhead,MS.

River and Soil Conditions...

The soils continued to dry out over the month of October with only minor relief for portions of the lower Yazoo River basin. Soil moisture conditions continued to be slightly above normal over eastern sections of Mississippi; near normal over the remainder of Mississippi; and slightly below normal over southeast Arkansas and northeast Louisiana. Most of the area was in need of rainfall especially for agricultural interests.

Moderate to heavy rainfall over the upper Big Black occurred during the first half of the month. The Big Black at West experienced minor flooding while the lower portions of the river experienced moderate rises below flood

stage. Minor rises were noted on the Pearl River and the upper Chickasawhay River. The remaining river systems experienced little or no changes.

With below normal soil conditions and a normal to slightly above normal rainfall forecast for the next 60 to 90 days, flood potential for the rivers in northeast Louisiana and southeast Arkansas will be near normal. With slightly above to near normal soil conditions over most sections of Mississippi and near normal rainfall forecast for the next 60 to 90 days, flood potential for Mississippi should remain near normal with the exception of eastern sections of the state where flood potential should be slightly above normal.

Rainfall for the month of October...

<u>RIVER BASIN</u>	<u>RAINFALL</u>	<u>DEPARTURE FROM NORMS</u>
Southeast Arkansas (Chicot & Ashley counties)	1.25 to 2.75 inches	Much below normal.
Northeast Louisiana (Tensas, Boeuf, Bayou Macon & Lower Ouachita)	0.75 to 2.25 inches northern sections	Much below normal.
	0.75 to 2.00 inches central sections	Much below normal.
	1.50 to 2.50 inches southern section	Much below normal.
Lower Yazoo	1.75 to 4.25 inches	Much below to below normal except for above normal from Greenville to Greenwood.
Big Black	2.00 to 4.75 inches upper basin	Above normal except below normal over Choctaw County.
	2.00 to 3.00 inches middle basin	Below normal.
	1.50 to 2.50 inches lower basin	Much below normal.
Homochitto/ Bayou Pierre	1.00 to 2.50 inches	Much below normal.
Pearl (abv Jackson)	2.50 to 4.25 inches	Below to above normal.
Pearl (Blo Jackson)	1.00 to 3.25 inches	Much below normal over most southern sections to near normal in Rankin County.

Pascagoula	0.75 to 2.50 inches over the Leaf basin.	Much below normal.
	1.75 to 2.50 inches over the Black Creek basin.	Much below normal.
	1.25 to 5.00 inches over the Chickasawhay	Normal to above normal northern sections to much below over Clarke County.
Tombigbee tributaries in the JAN HSA	2.50 to 4.25 inches	Below to slightly above normal.

The heaviest rainfall amounts in the HSA for the month were: 5.03 inches at Topton, MS; 4.92 inches at Meridian, MS; 4.65 inches at Winona, MS; 4.29 inches at Kosciusko, MS; 4.20 inches at Greenville, MS; 4.15 inches at Columbus, MS; 4.12 inches at Moorhead, MS; 4.00 inches at Leland, MS.

Here at the Jackson WFO, the October monthly rainfall was 3.13 inches, which was 0.29 inches below normal. We had received 49.87 inches of rainfall through the end of October which was 4.30 inches above normal.

At the Meridian Key Field, the October monthly rainfall was 4.92 inches, which was 1.64 inches Above normal. Meridian had received 61.72 inches through the end of October which was 13.33 inches above normal.

Mississippi River...

The Mississippi River from Arkansas City to Natchez trended down over the month. Arkansas City and Greenville were above seasonal normals for the first half of the month and trended below for the remainder of the month. Vicksburg remained above seasonal normal for the first three-fourths of the month and then fell below for the remainder of the month. Natchez stayed above seasonal norms for the month. The provisional high and low stages for October are listed below:

Location	High Stage(ft)	Date	Low Stage(ft)	Date
Arkansas City, AR	10.36	10/02	2.76	10/31
Greenville, MS	21.92	10/02	13.78	10/31
Vicksburg, MS	14.81	10/04	6.65	10/23
Natchez,MS	21.33	10/05	13.74	10/23

Products issued...

Total Flood Warning products issued: 1
Total Flood Statement products issued:4
Daily Rainfall Products (RRA'S) issued 31
Daily River Forecast Products (RVS'S) issued: 31
Daily River Stage products (RVA'S) issued 31

*Marty V. Pope
Service Hydrologist*

Note: Stage and precipitation data was furnished with cooperation from Mississippi, Louisiana, and Arkansas, N.W.S. Cooperative Observers, United States Geological Survey, United States Army Corps of Engineers and the Pearl River Valley Water Supply District, Pat Harrison Waterway District, and the Mississippi Department of Environmental Quality.

*cc: USGS Little Rock District
USGS Ruston District
USACE Mobile District
USACE Vicksburg District
USACE Mississippi Valley Division
USGS Mississippi District
SRH Climate, Weather and Water Division
LMRFC
Pearl River Valley Water Supply District
Hydrologic Information Center
Southern Region Climate Center
Pat Harrison Waterway District*